IRON SOFT PLUS™ SERIES

Water Conditioners

Installation Instructions & Owner's Manual

CAUTION: The manufacturer does not recommend the use of any resin cleaners. Please refer to page 6 in this manual or the warning label on the back of the brine tank.

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YOUR WATER TEST

Hardness	_____gpg
Iron	_____ppm
pH	_____number
*Nitrates	_____ppm
Manganese	_____ppm
Sulphur	_____yes/no
Total Dissolved Solids	_____

*Over 10 ppm may be harmful for human consumption. Water conditioners do not remove nitrates or coliform bacteria, this requires specialized equipment.

Your Iron Soft Plus Series water conditioners are precision built, high quality products. These units will deliver conditioned water for many years to come, when installed and operated properly. Please study this manual carefully and understand the cautions and notes before installing. This manual should be kept for future reference. If you have any questions regarding your water conditioner, contact your local dealer.

PRE-INSTALLATION INSTRUCTIONS:

Although the Iron Soft Plus Series Water Conditioner is shipped complete, some assembly may be required.

1. After unboxing the unit, please note that on most models the control valve is installed on the tank. If not, remove "split flange" from control valve adapter base, remove cardboard tank shim. Inspect "O" Ring on top of flange and grease with silicone provided. Place valve (shipped in a separate box) on adapter base. The valve is "keyed" and will only attach one way. Using split flange, attach control valve to tank.

CAUTION: **The "split flange" should secure the valve with the top of the flange facing up. Please note "top" on the split flange.**

2. Install the chlorine generator on the brine valve ***(Fig. 3)*** by inserting 3/8" tube and tightening the nut. Plug generator's electrical end into receiving adapter from the back plate. Do not install brine line at this time.

CAUTION: **Never grab onto the generator to move unit. This will result in cracking the valve body.**

3. Install meter and bypass, if ordered, ***(Fig. 3)*** using silicone grease provided on "O" Rings. Extra "O" Rings have also been provided in case a tear occurs during installation.
   NOTE: Meter should be installed between the control valve and the bypass with the meter "turbine" being installed on the outlet side of the control valve ***(Fig.3)***.

4. Secure both the meter and the bypass using the clips provided.
   NOTE: There will be some up and down "play" and should not be of concern since the "O" Rings will seal and no leaks should occur.

INSTALLATION INSTRUCTIONS:

IMPORTANT: *In the following installation instructions various types of plumbing pipe are recommended. These types may or may not be approved for your local plumbing codes. All plumbing must be installed according to local plumbing codes.*

1. A selection site should be chosen for your conditioner. If you have a well system, this would be after the pressure tank but before the hot water heater ***(Fig. 1)***. If you have city water, install the softener on the inlet line to the building before the hot water heater ***(Fig. 2)***.
   NOTE: Try to locate the softener as close to a drain (floor drain, sump pump, etc.) as possible.

WELL WATER INSTALLATION

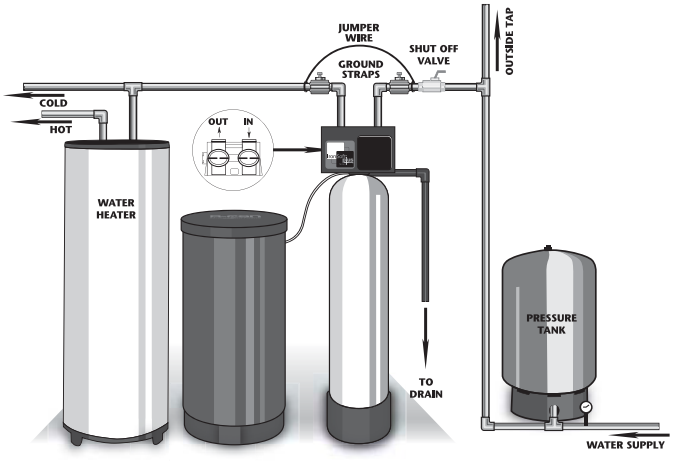


Figure 1

MUNICIPAL INSTALLATION

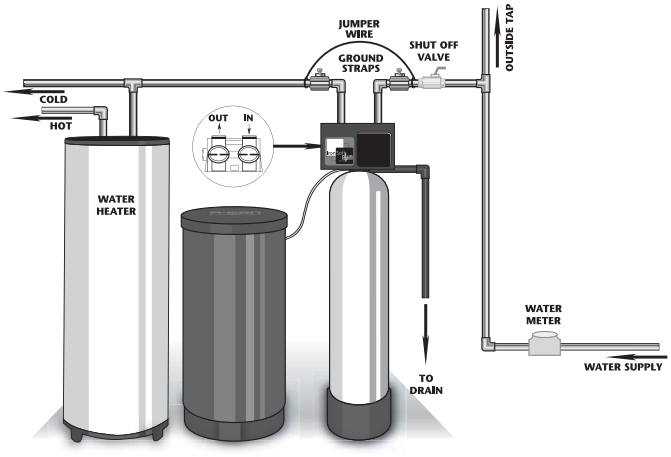


Figure 2

2. Notice on the casting, the inlet and outlet markings, make sure the incoming water is plumbed to the inlet and outlet is plumbed to service ***(Fig. 3)***. Your water softener must be installed with a bypass valve. If your conditioner is not equipped with one, make a provision in the plumbing system for a bypass to be installed.

   IMPORTANT: Make sure the water is turned off and pressure is released before a cut is made into plumbing system. At this time you should also make provisions for hard water lines to outside tap and anywhere else desired.

3. To "bypass" your water conditioner, turn valves A & B to the bypass open position ***(Fig. 3.)***. This will supply unconditioned water to the house.

4. Check local plumbing code for approved piping. The size diameter of pipe should be equal to the size opening of the casting or larger.

5. In the brine tank there is a piece of flexible brine tube. This tube runs from the brine flow control assembly (in the brine tank, ***Fig. 4***) to the chlorine generator, located on the control head. Remove chlorine generator from valve and insert tubing into generator, fitting firmly; pull on tubing making sure it is secure. Do not attach other end to the brine tank, as this will be covered in start-up procedures. Reattach generator to valve, making sure clip is secure.

   NOTE: Brine line should go into elbow approximately 3/4".

6. The drain line must be connected from the drain line flow control ***(Fig. 4)***, to a floor drain, sump pump, etc. This pipe is not provided with your water conditioner and is the responsibility of the installer. Check your local plumbing code for approved piping. In any case, it should be of adequate inside diameter to allow for proper drainage. Secure pipe to flow control and run to drain.

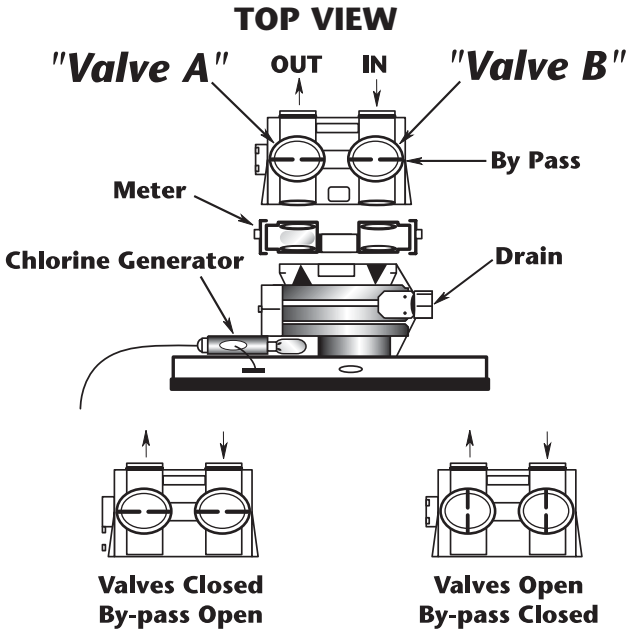


Figure 3

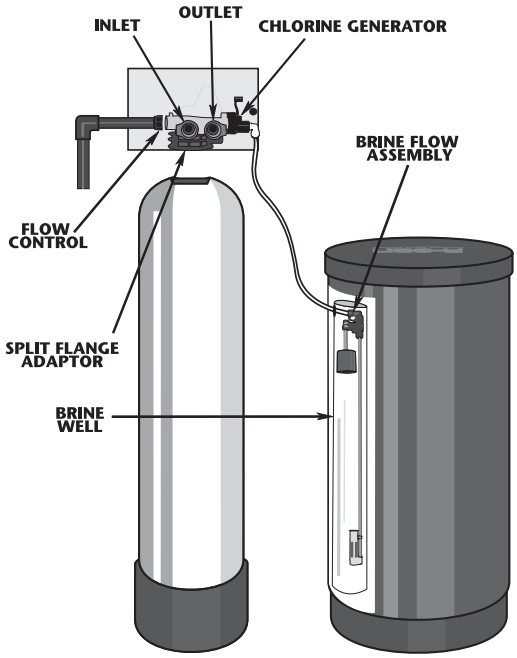


Figure 4

CAUTION: **Make sure the drain, drain control and clip are attached securely to the control valve before start up.**

IMPORTANT: A 2" air gap is required on the drain line.

7. Notice the elbow protruding from the brine tank. It is recommended to run a line from this elbow to the drain. This is a precautionary step in case of brine tank overflow. A separate line should be run.

CAUTION: **Never connect the brine tank overflow line and drain line together; however, the same drain may be used.**

START-UP PROCEDURES FOR ELECTRONIC CONTROLLER:

- After installation is complete, rotate bypass handles to bypass mode ***(see "Valves Closed" in Fig.3)***.
- Turn on water and check for leaks.
- Fully open a cold water faucet — preferably a laundry sink or bathtub with no aerator.
- Allow water to run until clear to rid pipes of debris which may have occurred during installation.

NOTE: The system regeneration sequence for the Iron Soft Plus Conditioner.

Backwash
Regenerate (Brine)
Rapid Rinse
Fill
Service

The system is now ready for filling with water. For the purpose of filling the softener, leave the unit in the bypass position until the 2nd step, then repeat steps 1-6 with the unit full. **Do not open the bypass at this time,** it will be filled in the backwash position. Once the unit is filled with water (step 2), then open the bypass.

1. With the softener in the bypass mode ***("Bypass valve," Fig. 3)*** and the control valve in normal operation where the display shows either the time of day or the gallons remaining:
   Manually add 5 GALLONS of water to the regenerant tank.

   NOTE: If too much water is put into the brine tank during softener startup, it could result in a salty water complaint after the first regeneration.
   During the first regeneration the unit will draw out the initial volume of brine/regenerant and refill it with the correct preset amount.

2. Press and hold the button for 5 seconds.

   NOTE: You will hear a click, indicating the valve will go into regeneration. There is a 10-second delay until the motor starts to advance, the unit is now in the backwash position. Once motor has stopped, open inlet handle ***("Valve B," Fig. 3)*** of the bypass valve **very slightly** allowing water to fill the tank **slowly** in order to expel air. Once air is expelled and water is running at drain, open inlet to control.

CAUTION: **If water flows too rapidly it could result in loss of media to the drain. When the water is flowing steadily to the drain without the presence of air, slowly open the inlet valve. Check that the drain can receive the flow of water. Restore power.**

3. Connect brine line to brine tank. Press button again to put the valve into BRINE position. Display will flash No. 2 until position is reached. Check the brine line for section. Verify that water is being drawn from regenerant tank with no air leaks or bubbles in the brine line. There should be a slow flow to the drain.

4. Press button and place unit into rinse position. Display will flash No.3 until position is reached. Check drain line to be secure and see that drain can receive the flow of water. There should be a rapid flow to the drain. Unplug transformer to keep the valve in the RINSE position. Allow to run until clear and without air. While the unit is rinsing, load the brine tank with water softener salt.

START-UP PROCEDURES FOR ELECTRONIC CONTROLLER CONT'D:

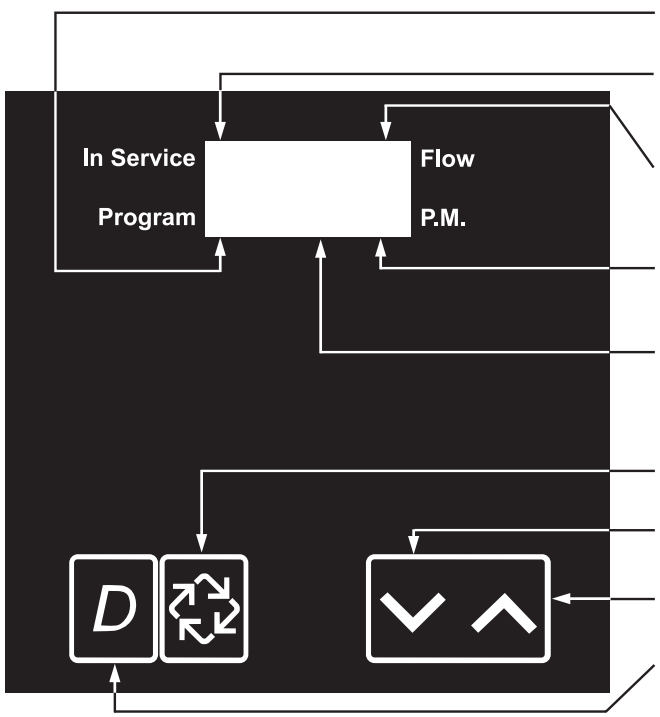
CAUTION: **Damage or destruction to the media may occur if salts containing additives are used with the Iron Soft Plus models. Most "solar" and/or "block" salts do not contain additives detrimental to this unit. If unsure, please check with manufacturer. Many "pellet" or "cube" type salts are formulated with cleaning agents or additives which can cause harm to the media. Salt manufacturers do not always list additives in their products. Please check with salt manufacturers for any cleaning agents, binders or phosphate material added to salt.**

NOTE: The manufacturer does recommend the brine tank be cleaned once a year to discard accumulated dirt from the salt.

5. Press the button and place unit into the brine tank fill position. Check to verify that the regenerant tank is filling at a rate of 1/2 gallon per minute. Check Brine line connections for leaks.
   NOTE: See page 18, Safety Float Assembly, Item No. 2, for location of 1/2 gpm Refill Flow Control.
6. Press button again, valve will cycle back to the normal operating position with the time of day and gallons remaining displayed.
7. Repeat steps 1-6 and now check the various cycles for proper operation.
8. Once the cycle operation has been verified, place bypass valve in the normal operating mode ***("Valves Open," Fig. 3)*** by opening the outlet bypass handle.
9. Go to laundry tub or bathtub faucet, preferably a faucet without an aerator, and turn on the cold water, let the water run. Note the color of water coming from faucet. If discolored let water run until clear.

NOTE: At no time should there be "large particles" of media noticed at faucet or laundry tub. If this is seen, immediately shut off water and bypass system as this could be an indication of a distributor failure. Contact manufacturer or distributor for assistance.

TIMER DISPLAY DESCRIPTION:



Program Indicator
Programming Mode Active, Light On

In Service Indicator
Timer In Service, Light On
Regenerate Tonight, Flashing Light

Flow Indicator
No Water Flow, Light Off
Water Flow, Light Flashing

P.M. Indicator
P.M., Light On
A.M., Light Off

Display Screen
Time of Day alternates with Process Display
Example: Volume Remaining, Time Remaining, Programming Information

Extra Cycle Button
Valve in Regeneration, Light On

Set Down Button
Adjust Values Down

Set Up Button
Adjust Values Up

Diagnostic Button
View Flow Rate, Peak Flow Rate, Totalizer, Hours Between Last Two Regenerations, Hours Since Last Regeneration, Adjustable Volume Remaining, Valve Position, Software Version

TIMER OPERATION:

Set Time of Day
When the timer is In Service, push either the Set Up or Set Down button once to adjust the Time of Day by one digit. Push and hold to adjust by several digits.

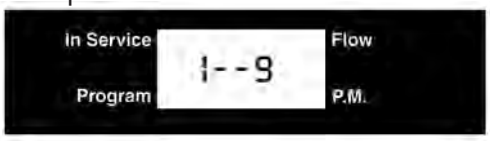
Manually Initiating a Regeneration
1. When timer is In Service, press the Extra Cycle button for five seconds to force a manual regeneration.

   NOTE: You will hear a click, indicating the valve will go into regeneration. There is a 10-second delay until the motor starts to advance.

2. The timer reaches Regeneration Cycle Step #1.
3. Press the Extra Cycle button once to advance valve to Regeneration Cycle Step #2 (if active).
4. Press the Extra Cycle button once to advance valve to Regeneration Cycle Step #3 (if active).
5. Press the Extra Cycle button once to advance valve to Regeneration Cycle Step #4 (if active).
6. Press the Extra Cycle button once to advance valve to Regeneration Cycle Step #5 (if active).
7. Press the Extra Cycle button once more to advance the valve back to In Service

Timer Operation During Regeneration
In the Regeneration Cycle step display, the timer shows the current regeneration step number the valve is advancing to, or has reached, and the time remaining in that step. The step number that displays flashes until the valve completes driving to this regeneration step position. Once all regeneration steps are complete, the timer returns to In Service and resumes normal operation.

Example:



Less than 10 Minutes Remaining
in Regen Step #1

Press the Extra Cycle button during a Regeneration Cycle to immediately advance the valve to the next cycle step position and resume normal step timing.

Start a Regeneration Tonight
With metered delayed timers, press the Extra Cycle button momentarily. The In Service indicator dot flashes and starts a Regeneration tonight at the programmed Regeneration Time.

Day Regeneration Timer
During normal operation the Time of Day display is visible at all times. The timer operates normally until the number of days since the last regeneration reaches the Regeneration Day Override setting. Once this occurs, a regeneration cycle is initiated at the preset Regeneration Time.

Flow Meter Equipped Timer
During normal operation the Time of Day display alternates with the Volume Remaining display (gallons or m3).

— As treated water is used, the Volume Remaining display counts down from the calculated system capacity to zero or (----). When this occurs a Regeneration Cycle begins or delays to the set Regeneration Time.

— Water flow through the valve is indicated by the Flow Dot that flashes in a direct relationship to flow rate.

PROGRAMMING THE ELECTRONIC CONTROLLER:

1. Enter 3200NT Programming Mode

Press and hold both the Set Up and Set Down buttons for five (5) seconds to enter Programming Mode. When the program mode is entered, the program light illuminates.

2. Set Feed Water Hardness

The feed water hardness setting displays only if the Regeneration Type is set to Meter Immediate or Meter Delayed.

— Press the Set Up and Set Down buttons to set the amount of feed water hardness (in grains/gallon). The system automatically calculates treated water capacity based on the feed water hardness and the system capacity.

— Press the Extra Cycle button to proceed to the next step.

3. Set Regeneration Time

A non-flashing colon between two sets of numbers identifies the Regeneration Time display. Set the desired time of day that you want Regeneration to occur.

— Press the Set Up and Set Down buttons to adjust this value.

— Press the Extra Cycle button to proceed to the next step.

4. Set Regeneration Day Override

Use this display to set the maximum amount of time (in days) the unit can be In Service without a Regeneration.

NOTE: The manufacturer has preset this to every 6 days.

— For System 4 Time Clock regeneration mode, the system regenerates at the time set in Step 4 after the number of days programmed in this step.

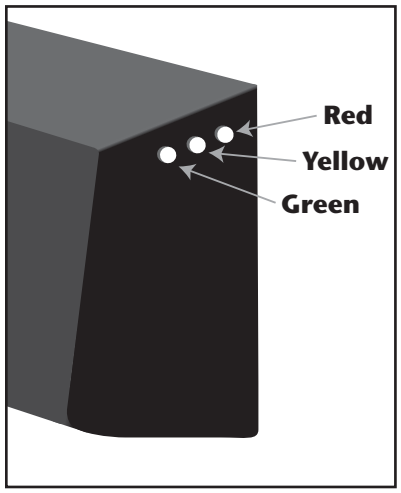
— For all other System Types (4 Meter Immediate, 4 Meter Delayed, 5, 6, 7, 9), the system regenerates after the number of days programmed in this step unless the meter initiates a Regeneration cycle earlier.

— Press the Extra Cycle button to proceed to the next step.

Timer programming is complete and exits from the Programming Mode. Normal operation resumes.

LIGHT / ALARM OPERATION:

Light panel operation with audio alarm:
On the right side of the control valve there are 3 lights — green, yellow and red.



1. The ***green*** light indicates the unit is in the service position delivering soft water.
2. The ***red*** light indicates the unit is in the regeneration cycle.
3. The ***yellow*** light with the ***red*** light indicates a failed chlorine regeneration signal and the unit is still in regeneration.
4. The ***yellow*** light with a ***green*** light indicates a failed regeneration and the unit is now in the service position. **An *audio alarm* will also sound every minute.** This will signal a failed chlorine regeneration.

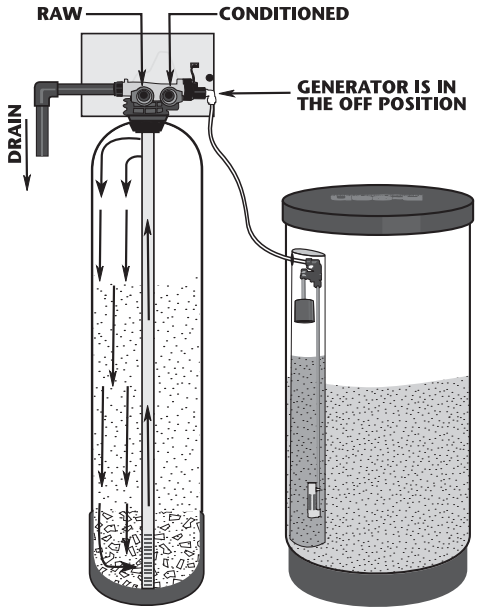
To stop the alarm simply unplug the unit, wait 5 seconds, then plug it back in. This will clear the alarm and clear the yellow light. You will not lose any programmed information on the Iron Soft Plus timer.

Check salt level in brine tank:
If salt level is low this will trigger the yellow light and alarm. Remember to always keep salt above water level. If salt level is good, contact dealer or refer to the troubleshooting section in this manual.

WATER CONDITIONER FLOW DIAGRAMS:

LEGEND:
ZEOLITE GRAVEL BED SALT

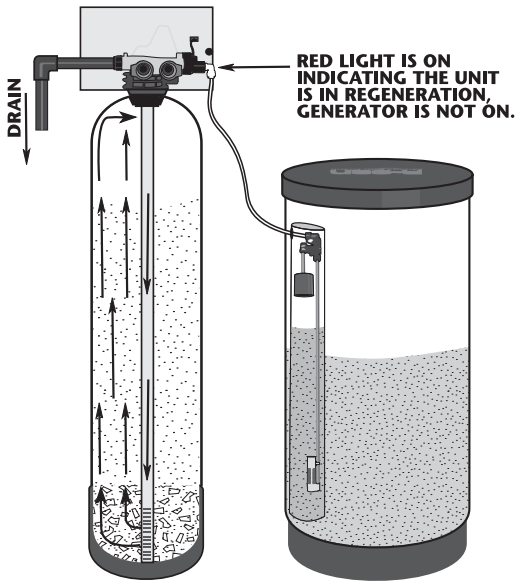
1



Green light is on indicating service position and that the last regeneration was proper.

1. SERVICE POSITION:
Raw water enters control head and flows down through the Zeolite mineral, removing hardness and iron (neutralizing acidic water conditions on ISP-1 models).

2



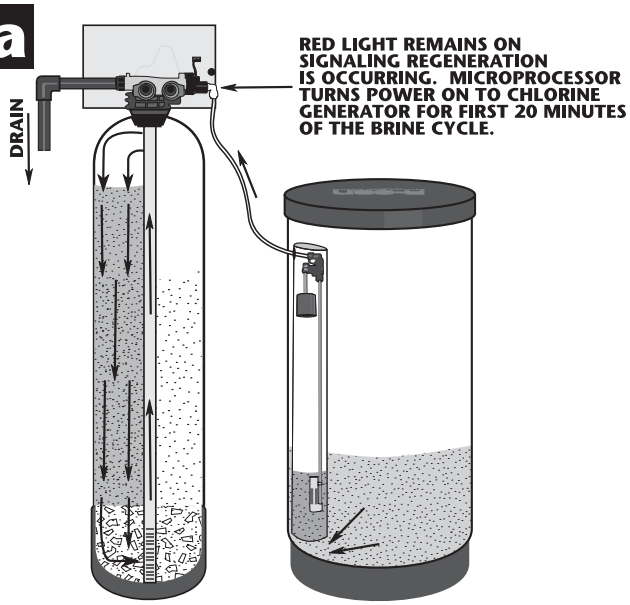
2. BACKWASH POSITION:
Raw water enters control head and flows into lower distributor upward through mineral bed and out to drain, lifting and cleaning turbid particles from Zeolite bed.

WATER CONDITIONER FLOW DIAGRAMS:

LEGEND:

ZEOLITE | GRAVEL BED | SALT

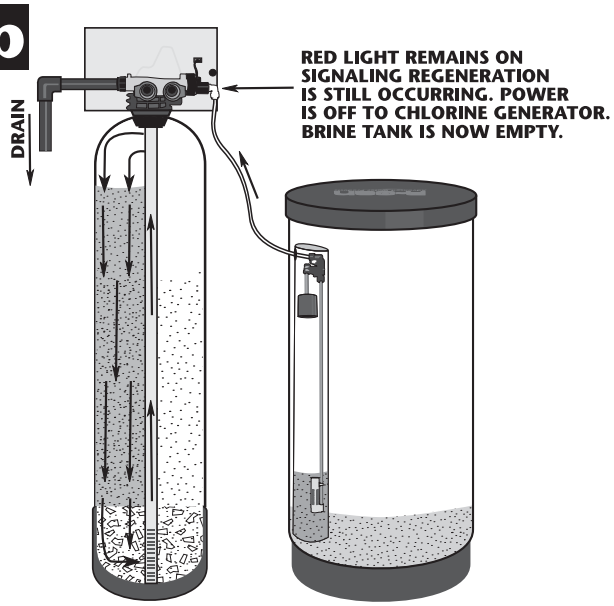
3a


DRAIN
RED LIGHT REMAINS ON SIGNALING REGENERATION IS OCCURRING. MICROPROCESSOR TURNS POWER ON TO CHLORINE GENERATOR FOR FIRST 20 MINUTES OF THE BRINE CYCLE.

3a. BRINE RINSE POSITION:

Raw water enters control head flowing through the injector, drawing brine from the brine tank. Microprocessor turns on the chlorine generator allowing brine and chlorine to flow through the Zeolite mineral, sanitizing and regenerating the water conditioner.

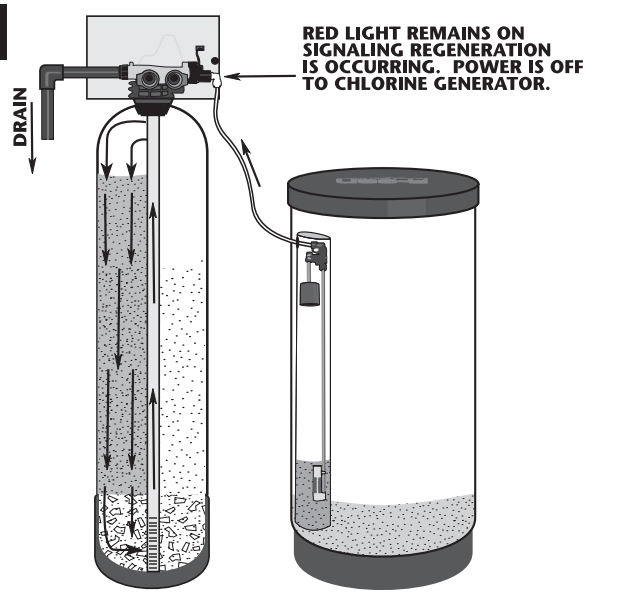
3b


DRAIN
RED LIGHT REMAINS ON SIGNALING REGENERATION IS STILL OCCURRING. POWER IS OFF TO CHLORINE GENERATOR. BRINE TANK IS NOW EMPTY.

3b. SLOW RINSE POSITION:

Chlorine generator is turned off, raw water enters control head and flows down through the Zeolite mineral, rinsing chlorine and brine to drain.

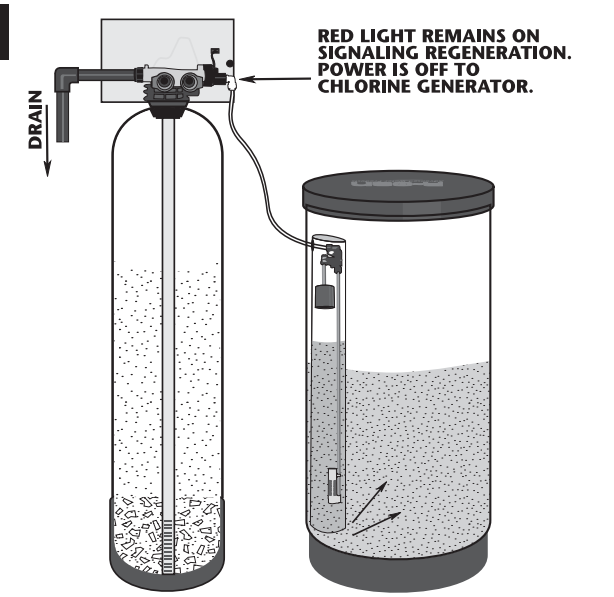
4



4. RAPID RINSE POSITION:

Chlorine generator is off. Raw water enters control head and flows down through the Zeolite mineral, rinsing any excess brine to drain.

5



5. BRINE TANK FILL POSITION:

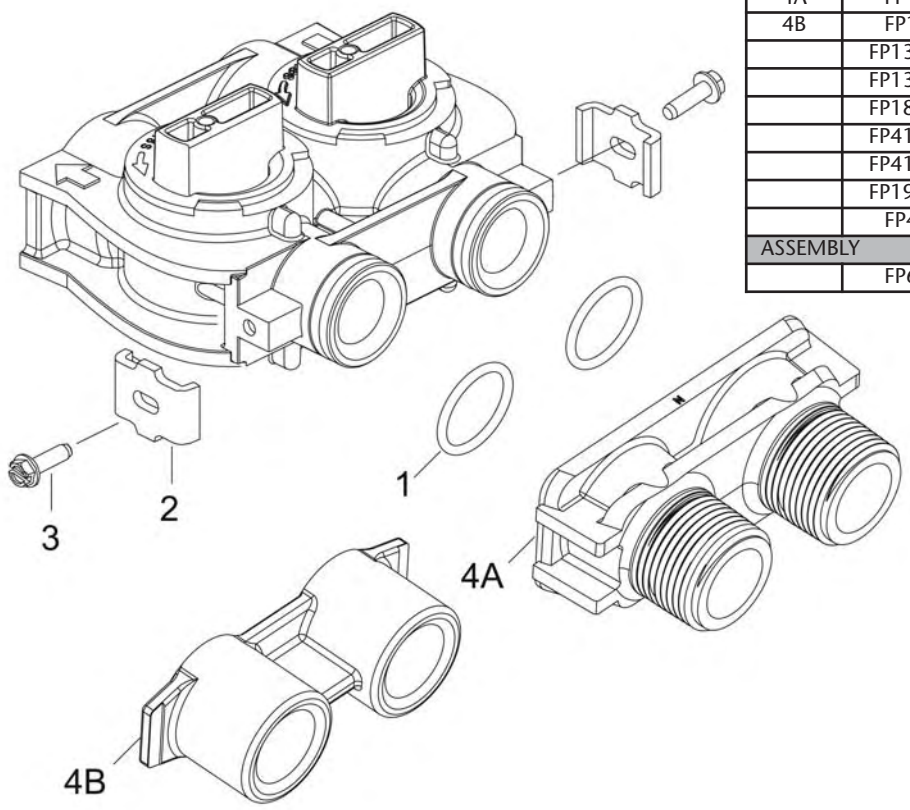
Water enters control head to self-clean injector while flowing back to refill the brine tank. Unit will deliver soft water in this position.

TROUBLESHOOTING GUIDE:

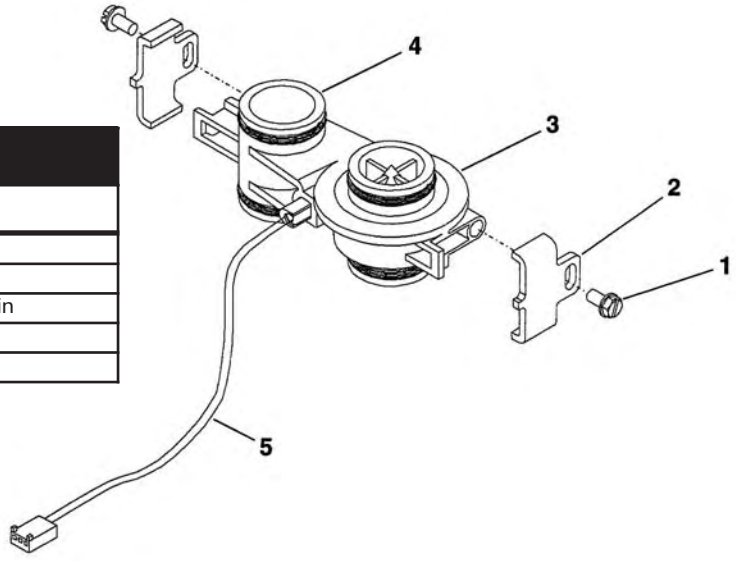
PROBLEM	CAUSE	CORRECTION
1. Softener fails to regenerate	A. electrical service to unit has been interrupted	A. assure permanent electrical service (check fuse, plug, pull chain or switch)
	B. timer is defective	B. replace timer
	C. power failure	C. reset time of day
	D. timer programming bad	D. check programming and reset
2. Hard water	A. bypass valve is open	A. close bypass valve
	B. no salt in brine tank	B. add salt to brine tank and maintain salt level above water level
	C. injector screen plugged	C. clean injector screen
	D. insufficient water flowing into brine tank	D. check brine tank fill time and clean brine line flow control if plugged
	E. hot water tank hardness	E. repeated flushing of the hot water tank as required
	F. leak at distributor tube	F. make sure distributor tube is not cracked, check "O" Ring and tube pilot
	G. internal valve leak	G. replace seals and spacers and/or piston
	H. flow meter jammed	H. remove obstruction from meter
	I. flow meter cable disconnected	I. check meter cable connection to timer and meter
	J. improper programming	J. reprogram the control for proper regeneration type, inlet hardness, capacity or flow meter size
3. Unit used too much salt	A. improper salt setting	A. check salt usage and salt setting
	B. excessive water in brine tank	B. see problem no. 7
	C. improper programming	C. check programming, reset
4. Loss of water pressure	A. iron buildup in line to water conditioner	A. clean line to water conditioner
	B. iron buildup in water conditioner	B. clean control head and increase frequency of regeneration
	C. inlet of control plugged due to foreign material broken loose from pipes	C. remove piston and clean control head
5. Loss of mineral through drain line	A. air in water system	A. assure that well system has proper air eliminator control — check for dry well condition
	B. drain line flow control too large	B. check flow control — change if needed

PROBLEM	CAUSE	CORRECTION
6. Iron in conditioned water	A. fouled mineral bed	A. check backwash, brine draw and brine tank fill — increase frequency of regeneration
7. Excessive water in brine tank	A. plugged drain line flow control	A. clean flow control
	B. brine valve failure	B. replace brine valve
	C. improper programming	C. check program — reset
	D. faulty air check or safety float	D. replace complete safety float assembly
8. Salty water in service lines	A. plugged drain line flow control	A. clean flow control
	B. plugged injector system	B. clean injector and screen
	C. timer not cycling	C. replace timer
	D. foreign material in brine valve	D. replace brine valve seat and clean valve
	E. foreign material in brine line flow control	E. clean brine line flow control
	F. low water pressure	F. raise water pressure
9. Softener fails to draw brine — Yellow Light Indication	A. drain line flow control is plugged	A. clean drain line flow control
	B. injector is plugged	B. clean injector and port behind injector
	C. injector screen plugged	C. clean screen
	D. line pressure is too low	D. increase line pressure to 25 psi
	E. internal control leak	E. change seals, spacers and piston assembly
	F. improper programming	F. check programming — reset
	G. probes scaled in chlorine generator	G. clean or replace chlorine generator
	H. drawing air during regeneration	H. check brine line connections
	I. electrical malfunction	I. replace board or wire harness
10. Control cycles continuously	A. broken or shorted micro-switch	A. determine if switch or timer is faulty and replace
	B. faulty cam operation	B. replace or reinstall cam
11. Drain flows continuously	A. valve not programming correctly	A. check time program and positioning of control
	B. foreign material in control head	B. remove power head assembly and inspect bore, remove foreign material and check control in various regeneration positions
	C. internal control leak	C. replace seals and piston assembly
	D. drive motor jammed in regeneration	D. replace seals and piston, drive motor, check for broken gears

REPLACEMENT PARTS:

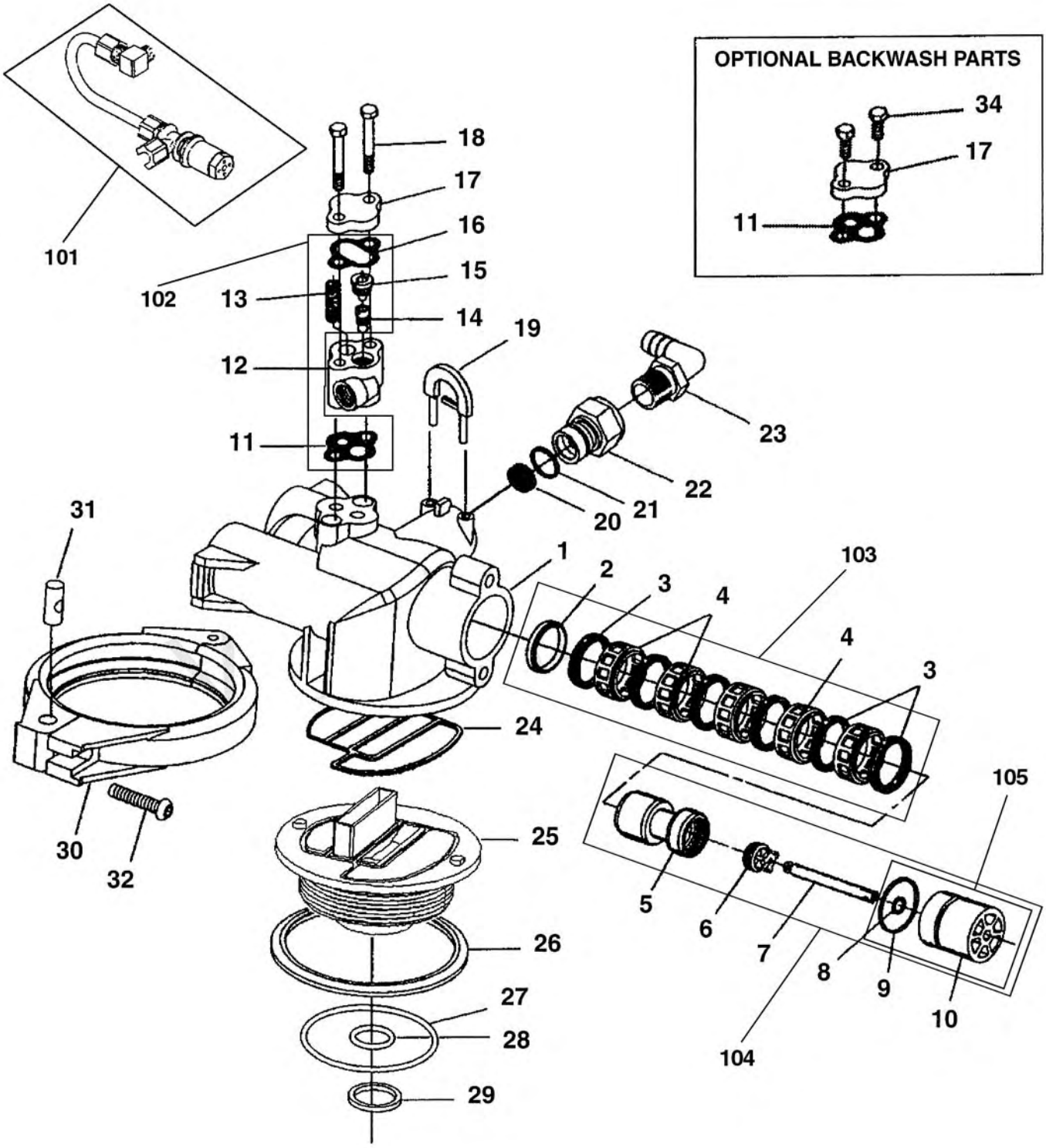


PLASTIC BYPASS ASSEMBLY		
Item No.	Part No.	Description
1	FP9452K83	O-ring - 119
2	FP13255	Mounting clip
3	FP13314	Screw, hex washer head, 8-18x5/8
4A	FP18706	Yoke, plastic 1" NPT
4B	FP13708	Yoke, 3/4" brass
	FP13708-40	Yoke, 1" sweat
	FP13708-45	Yoke, 3/4" sweat
	FP18706-02	Yoke, 3/4" NPT plastic
	FP41027-01	Yoke, stainless 3/4" NPT
	FP41026-01	Yoke, stainless 1" NPT
	FP19620-01	Yoke assembly, 3/4", right angle, 90°
	FP40636	Yoke, 1-1/4" NPT brass
ASSEMBLY		
	FP60049	Plastic bypass assembly



ELECTRONIC METER ASSEMBLY		
Item No.	Part No.	Description
1	FP13314	Screw, hex washer, 8-18 x 5/8"
2	FP19569	Flow meter clip
3	FP19797	Meter body assembly, 3/4" turbin
4	FP9452K83	O-ring meter body
5	FP19791-01	Flow meter harness assembly

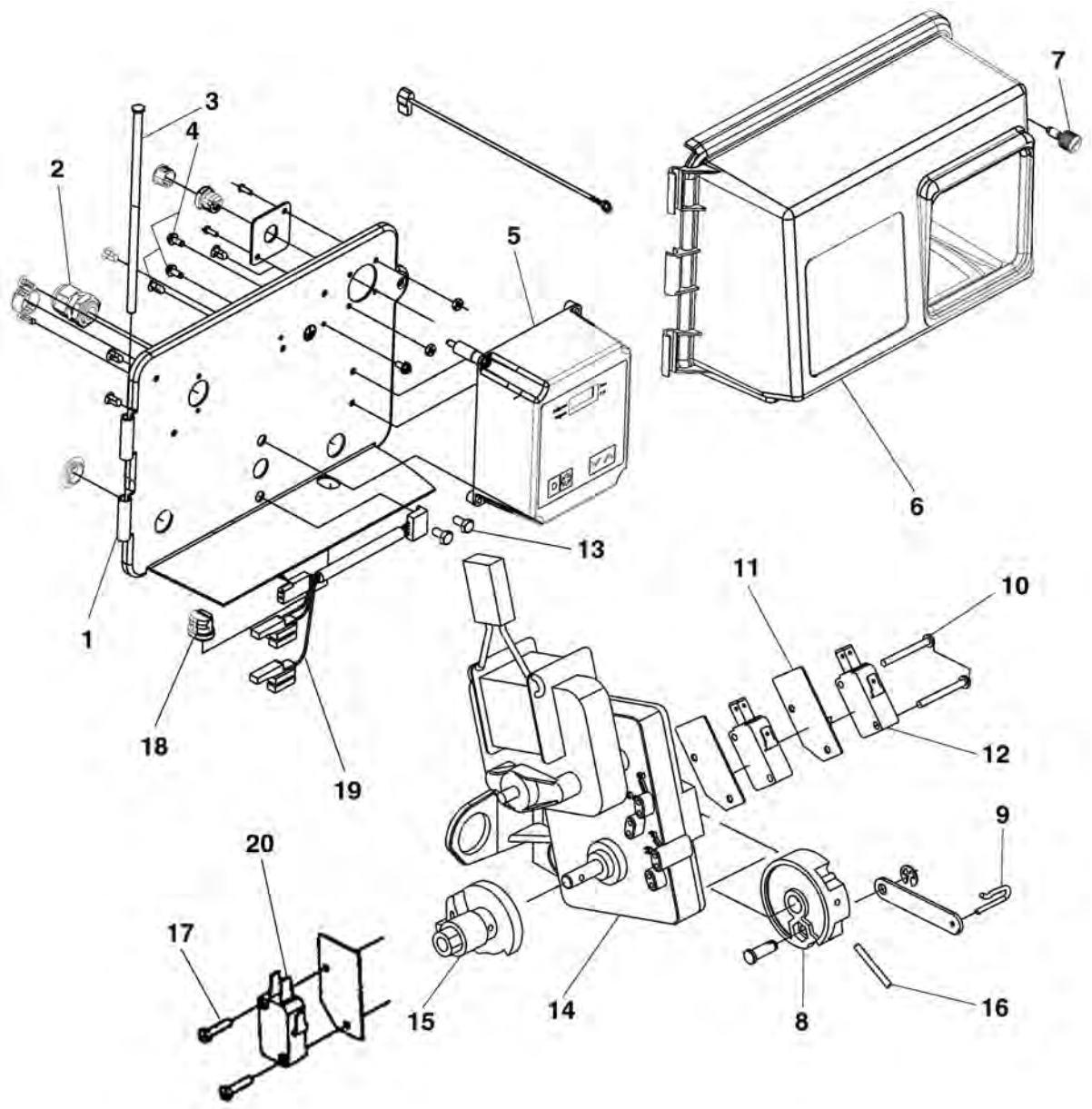
REPLACEMENT PARTS:



REPLACEMENT PARTS:

CONTROL VALVE ASSEMBLY					
Item No.	Part No.	Description	Item No.	Part No.	Description
1	FP19328	2510 valve body 1"		FP12090	3.5 GPM DLFC button
2	FP10757	End spacer		FP12091	4.0 GPM DLFC button
3	FP10545	Seal ring		FP12092	5.0 GPM DLFC button
4	FP11451	Spacer		FP12408	7.0 GPM DLFC button
5	FP15168	Piston		FP12087	2.0 GPM DLFC button
6	FP14309	Piston rod retainer		FP17814	6.0 GPM DLFC button
7	FP14452	Piston rod	21	FP11183	DLFC seal o-ring
8	FP10209	Seal quad ring	22	FP60705-00	Flow control housing
9	FP40078	Seal o-ring end plug	23	FP12338	1/2" DLFC drain fitting
10	FP10598	End plug	24	FP19936	Base seal
11	FP14805	Injector body gasket	25	FP19322	2510 adapter base
12	FP17776	Injector body plastic	26	FP19197	Slip ring
13	FP10227	Injector screen	27	FP18303	Tank o-ring
14	FP10914-1	Injector throat #1 white	28	FP13304	Distributor o-ring
	FP10914-2	Injector throat #2 blue	29	FP13030	Distributor o-ring retainer
	FP10914-3	Injector throat #3 yellow	30	FP60503	2510 clamp assembly
	FP10914-4	Injector throat #4 green	31	FP19998	Clamp pivot
15	FP10913-1	Injector nozzle #1 white	32	FP40057	Clamp screw
	FP10913-2	Injector nozzle #2 blue			
	FP10913-3	Injector nozzle #3 yellow			
	FP10913-4	Injector nozzle #4 green			
16	FP10229	Injector cover gasket	101	FP60011-090	Brine valve assembly
17	FP11893	Injector cover	102	CV100-1A	#1 injector replacement kit
18	FP10692	Injector cover screw		CV100-2A	#2 injector replacement kit
19	FP18312	DLFC retainer clip		CV100-3A	#3 injector replacement kit
20	FP12085	1.2 GPM DLFC button		CV100-4A	#4 injector replacement kit
	FP12086	1.5 GPM DLFC button	103	FP60121	Ring & seal replacement kit
	FP12088	2.4 GPM DLFC button	104	FP60090	Piston assembly kit
	FP12089	3.0 GPM DLFC button	105	FP10598	End plug replacement kit

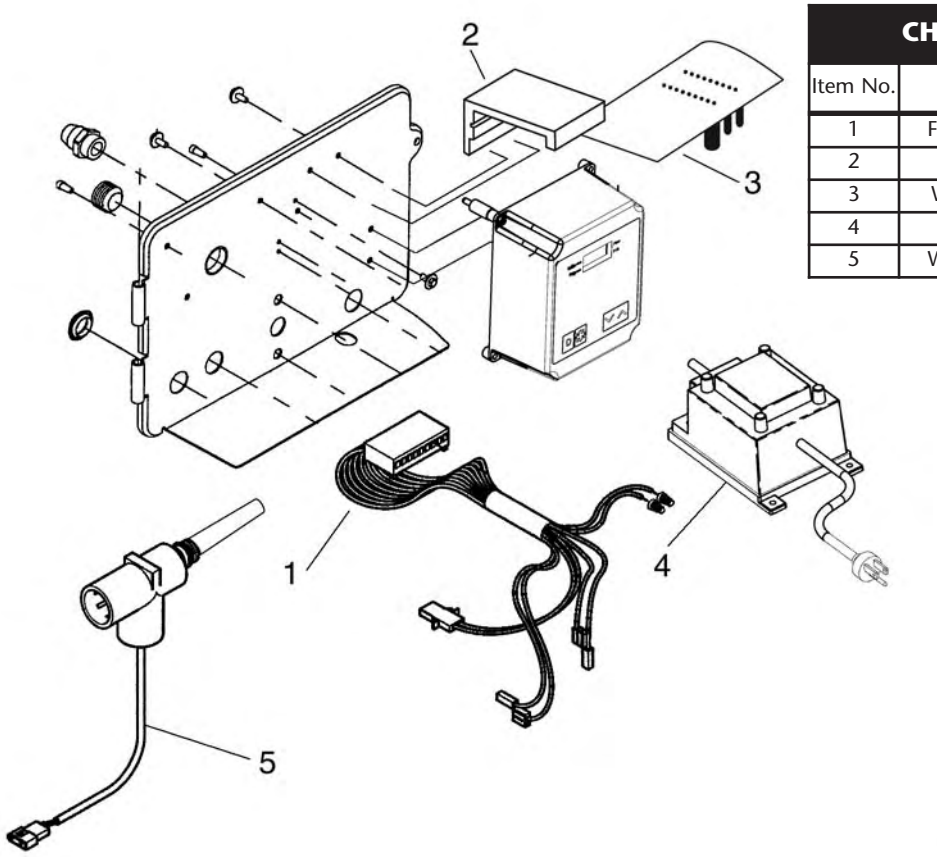
REPLACEMENT PARTS:



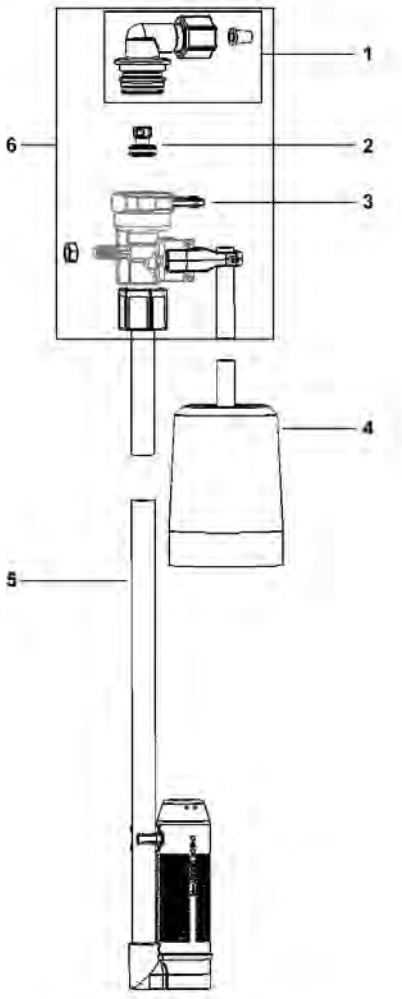
REPLACEMENT PARTS:

POWER HEAD ASSEMBLY		
No.	Part No.	Description
1	FP40264	Back plate
2	FP17967	Fitting, liquid tight
3	FP17845-02	Pin, hinge
4	FP10300	Screw
5	FP41062	3200NT timer assembly
6	FP60219-02	Cover assembly, black w/ clear window
7	FP15742	Screw cover
8	FP12576	Cam, drive STF518
9	FP10909	Pin, cam
10	FP14923	Screw, switch
11	FP10302	Insulator
12	FP10218	Microswitch
13	FP10231	Screw, motor bracket
14	FP41544	Motor, 110V 60 Hz
15	FP12777	Cam, brine cam
16	FP10338	Pin, roll
17	FP19849	Screw, switch
18	FP13547	Cord strain relief
19	FP40941	Drive wire harness
20	FP10896	Microswitch

REPLACEMENT PARTS:



CHLORINATOR BOARD ASSEMBLY		
Item No.	Part No.	Description
1	FP40154-01	Harness, 2510 chlorinator
2	FP42038	Bracket, circuit board, wtr rght
3	WR00020LF	Chlorinator circuit board
4	WR00040	24V dual transformer
5	WR00030CA	Chlorine generator



SAFETY FLOAT ASSEMBLY		
Item No.	Part No.	Description
1	CH4650-01	474 safety elbow 3/8"
2	CH4655	474 .5 GPM flow control
3	CH4615	Elbow locking clip
4	CH4640-32	474 float assembly 32" w/ grommets
5	CH4500-48	474 aircheck assembly 1/2" x 48"
6	CH4600	474 safety brine valve w/ 3/8" elbow
7	CH4600-50	474 safety brine valve .5 GPM
100	CH4700-27WR-1	.5 GPM safety float a/c assembly
	CG21840CB1C00	18 x 40 black brine tank
	BS-17A	3/8" brine line 6' assembly
	CH1018	2 piece overflow set
	CH1030-34.5	Brine well 4"
	CH7016	Brine well cap
	CG2191-81	Brine tank cover

BLANK

CAPACITY & PHYSICAL SPECIFICATIONS:

MODEL		ISP1-1044	ISP1-1054	ISP1-1354	ISP2-1044	ISP2-1054	ISP2-1354
[1]Capacity: (Grains/Lbs. NaCl)	Maximum	11,800 @ 12.4	22,600 @ 15.9	36,900 @ 21.2	20,300 @ 12.4	34,800@ 15.9	60,300 @ 26.5
	Medium	11,400 @ 9.3	20,700 @ 12.4	33,600 @ 15.9	19,100 @ 9.3	32,000 @ 12.4	48,300 @ 15.9
	Minimum	7,300 @ 3.2	16,400 @ 6.1	28,300 @ 9.5	11,100 @ 3.2	22,900 @ 6.1	28,200 @ 9.3
Amount of Media (Cu. Ft.)		1.0	1.5	2.5	1.0	1.5	2.5
Maximum Water Hardness (GPG)		20	30	40	40	60	80
[2]Maximum Iron (PPM)		8.0	10.0	15.0	8.0	10.0	15.0
[3]Minimum pH Required		6.5	6.0	6.0	7.0	7.0	7.0
[4]Total pH Adjusted Water at Continuous Flows		630	252	432	NA	NA	NA
[5]Peak Flow Rate (GPM @ P-PSI)		19 @ 15.0	17 @ 15.0	19 @ 15.0	19 @ 15.0	17 @ 15.0	19 @ 15.0
Continuous Flow Rate (GPM @ P-PSI)		9.0 @ 5.0	8.0 @ 5.0	9.0 @ 5.0	9.0 @ 5.0	8.0 @ 5.0	9.0 @ 5.0
Water Pressure Range (PSI)		25-100	25-100	25-100	25-100	25-100	25-100
Water Temp. (°F)		33-100	33-100	33-100	33-100	33-100	33-100
Electrical Requirements (volts-hertz)		110-50/60	110-50/60	110-50/60	110-50/60	110-50/60	110-50/60
Pipe Size		1"	1"	1"	1"	1"	1"
Total Dimensions:	Media Tank	10"W x 52"H	10"W x 62"H	13"W x 62"H	10"W x 52"H	10"W x 62"H	13"W x 62"H
	Brine Tank	18"W x 40"H	18"W x 40"H	18"W x 40"H	18"W x 40"H	18"W x 40"H	18"W x 40"H

[1] All ISP Water Conditioners are pre-factory set at medium salting. Note: influent waters must be at least 3 GPG hardness and 80 TDS. A calcite or corsex unit may be needed for correct operation.

[2] Iron removal may vary depending on form of iron, pH and other local conditions. On waters that are pre-chlorinated or where other pre-oxidation occurs, an iron precipitate can form that is too small to be filtered.

[3] The pH listed is the minimum for the influent water.

[4] This is the minimum number of gallons at the continuous flow rate corrected to a 7 pH. The actual amount of pH adjusted water may be greater.

[5] Unit not tested for capacity at these flow rates. Water quality may vary.